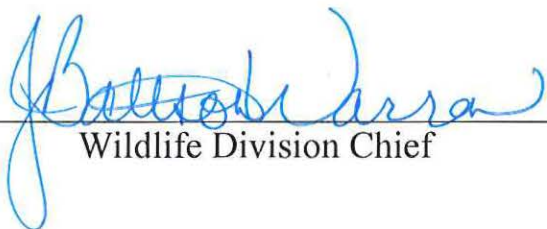


Limpp Community Lake

Ten Year Area Management Plan FY 2015-2024




Wildlife Division Chief


Date

Limpp Community Lake Area Management Plan Approval Page

PLANNING TEAM

Jerry Wiechman, Fisheries Management Biologist

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Dave Hoover, Wildlife Management Biologist

NORTHWEST REGION

RCT Chair

Roger E. Wolsten 4/22/2015
Signature Date

WILDLIFE DIVISION

Unit Chief

Michael D. Schroer 5/21/15
Signature Date

OVERVIEW

- **Official Area Name:** Limpp Community Lake, #5508
- **Year of Initial Acquisition:** 1955
- **Acreage:** 70 acres
- **County:** Gentry
- **Division with Administrative Responsibility:** Wildlife
- **Division with Maintenance Responsibility:** Wildlife
- **Statements of Purpose:**
 - A. Strategic Direction**

The primary purpose of Limpp Community Lake is to provide high-quality angling for area patrons. The area is also managed for hiking and wildlife viewing.
 - B. Desired Future Condition**

The desired future condition for Limpp Community Lake is to provide a “close-to-home” location for King City area residents to enjoy high-quality fishing, hiking and wildlife viewing opportunities.
 - C. Federal Aid Statement:** N/A

GENERAL INFORMATION AND CONDITIONS

- I. Special Considerations**
 - A. Priority Areas:** None
 - B. Natural Areas:** None
- II. Important Natural Features and Resources**
 - A. Species of Conservation Concern:** Species of conservation concern are not known from this site, but are found in the surrounding area. Area Managers should consult annually with the Natural History Biologist.
 - B. Caves:** None
 - C. Springs:** None
- III. Existing Infrastructure**
 - 1 gravel parking lot
 - 1 ADA privy
 - 1 concrete boat ramp
 - Approximately 1.5 miles of field access trails
- IV. Area Restrictions or Limitations**
 - A. Deed Restrictions or Ownership Considerations:** None
 - B. Federal Interests:** Federal funds may be used in the management of this land. Fish and wildlife agencies may not allow recreational activities and related

facilities that would interfere with the purpose for which the State is managing the land. Other uses may be acceptable and must be assessed in each specific situation.

C. Easements: Public utility easements occur along Route CC on the area's west boundary.

D. Cultural Resources: No known cultural resources.

E. Hazards and Hazardous Materials: None observed.

F. Endangered Species: Endangered Species are not known from this site, but are found in the surrounding area. Area Managers should consult annually with the Natural History Biologist.

G. Boundary Issues: Establishing accurate and identifiable boundary markers is a priority for this property.

MANAGEMENT CONSIDERATIONS

V. Terrestrial Resource Management Considerations

Challenges and Opportunities:

- 1) The Missouri Department of Conservation (the Department) owns a narrow buffer of land around the 29-acre lake. Species composition consists mostly of undesirable species, including honey locust, Osage orange, elm and eastern red cedar. Other species, such as hackberry, cottonwood, boxelder, black walnut, black oak and bitternut hickory, are also present. Shrub species include wild plum, sumac and autumn olive. The understory consists largely of brushy thorny vegetation. The narrowness of this land makes any management activities a challenge.
- 2) A grass field access trail is maintained around the outside of the lake to allow anglers multiple access points. The only constructive terrestrial management opportunities that exist are related to this access trail. Management opportunities for this area include reducing undesirable woody vegetation and promoting more beneficial native vegetation adjacent to the access trail.

Management Objective 1: Reduce undesirable woody cover along the field access trail.

Strategy 1: As opportunity arises, remove undesirable trees species and encourage the growth of desirable tree and shrub species.

VI. Aquatic Resource Management Considerations

Challenges and Opportunities:

- 1) Only a small portion of the lake's watershed is protected. The Department currently owns 10 percent of the 598 acres in the watershed (Figure 2). The lake

receives high rates of nutrient and sediment inputs from private pastureland (42% of land use) and cropland (29% of land use). There are other unknown pollutants that likely enter the lake from urban land uses (15%). Over the years, the lake has developed shallow areas with excessive aquatic vegetation, poor water quality, and a high potential for fish kills.

- 2) The sportfish community has faced poor habitat conditions and introductions of nuisance fish species (common carp, grass carp, gizzard shad). A renovation effort in 1978 involving draining the lake, treating it with rotenone, and restocking it with sportfish provided only short-term improvements to the fishery.
- 3) Large investments to improve the fishery (i.e., deepening the lake, renovating the fish community and improving the facilities) would be most effective when a larger portion of the watershed has long-term management practices that minimize sediment inputs and promote better water quality in the lake.
- 4) The size of the lake, relative to the size of the watershed, is desirable. This means lake levels will generally be maintained with minimal fluctuations and fewer flushing overflows. These conditions promote stable and productive shoreline areas, and reasonable rates of sedimentation.
- 5) One highlight of the current (2014) fishery is the relatively large size of largemouth bass (i.e., a larger percentage of fish over 18 inches) collected in periodic surveys.
- 6) Concerns with the fishery include small and slow-growing panfish (bluegill and crappie). Some factors responsible for the poor growth include competition with abundant gizzard shad, a lack of adequate aquatic vegetation, high turbidity, and the presence of nuisance species (grass carp and common carp).

Management Objective 1: As opportunities arise, minimize soil loss and chemical/nutrient runoff to the lake from both agricultural and urban sources in the watershed.

Strategy 1: Promote soil conservation practices with landowners in the watershed.

Strategy 2: Meet with King City officials to increase awareness of the watershed issues at Limpp Lake and to identify any long-term city plans that may affect the fishery (e.g., urban expansion, storm sewer improvements, development of parks or other green space).

Management Objective 2: Use appropriate fisheries management tools to maintain and improve the quality of fishing.

Strategy 1: Continue regular “put-n-take” stocking with channel catfish. The current stocking is conducted every two years at a rate of 15 fish per acre.

Strategy 2: Promote better catch rates with periodic placements of brush piles or artificial fish attractors that help concentrate sportfish and focus anglers.

Strategy 3: Experiment with specialty stockings of fish species that will better utilize the abundant forage base of gizzard shad and small, stunted panfish (e.g., hybrid striped bass, flathead catfish).

Strategy 4: If long-term sediment and nutrient inputs to the lake are significantly reduced, evaluate the feasibility of lake renovation to remove nuisance fish species and enhance fish habitat.

VII. Public Use Management Considerations

Challenges and Opportunities:

- 1) Trash is a chronic problem in the parking lot and along the shore where anglers concentrate.
- 2) A grass trail has been maintained around the lake since about 2005 to provide multiple access sites for shore anglers and for local patrons to hike. Despite regular mowing, encroachment of trees and shrubs into the trail increases maintenance efforts.

Management Objective 1: Keep the area well-maintained.

Strategy 1: Continue to regularly mow the high-use areas near the parking lot, boat ramp, dam and trail.

Strategy 2: Pick up trash prior to each mowing.

Strategy 3: Encourage local groups to adopt the area and conduct regular cleanup efforts.

Strategy 4: Maintain signs and reasonable enforcement efforts that effectively discourage littering.

Management Objective 2: Maintain a grass trail around the lake that invites regular use by anglers, wildlife viewers and recreational users.

Strategy 1: Mow the trail at least three times per year.

Strategy 2: Maintain a trail width of at least 10 feet with mowing and other controls on woody vegetation.

Strategy 3: Address chronic wet/muddy areas of the trail with rock and culvert placements.

VIII. Administrative Considerations

Challenges and Opportunities:

- 1) Boundary fence is shared with two adjoining landowners. No known fencing agreements are in place.
- 2) Maintenance of boundary fence is important, especially given the amount compared to the size of the area, as well as its proximity to the lake shoreline.

Management Objective 1: Work with neighboring landowners, as need arises, to ensure the maintenance of adequate boundary fencing.

Management Objective 2: Work with local authorities, as need arises, to maintain right-of-ways bordering Department areas.

MANAGEMENT TIMETABLE

Strategies are considered ongoing unless listed in the following table:

	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
Aquatic Resources Management										
Objective 1										
Strategy 2	X					X				
Objective 2										
Strategy 1		X		X		X		X		X
Strategy 2		X		X		X		X		X
Strategy 3	X	X	X	X	X	X				

APPENDICES

Area Background:

Limpp Community Lake is located in southwest Gentry County, less than a mile northwest of King City on Highway CC. The lake was originally built by Rufus Limpp in 1940 as a water supply for King City. The Department bought the lake in 1956, immediately deepened the basin and raised the dam to increase the water level by about 3 feet. The increased level resulted in a 30-acre lake, which was stocked in 1957 with largemouth bass, bluegill and channel catfish. The lake was opened to the public in 1959 and quickly became a very popular fishing spot.

Relatively shallow depths and high inputs of sediment and nutrients have resulted in chronic problems with nuisance vegetation, fish kills, and loss of lake surface area. The need for more compatible land practices in the watershed has been recognized since the lake was purchased by the Department.

In addition to regular stocking of channel catfish, attempts to improve the fishery have included stocking of several different species including redear sunfish (1971,1974), and grass carp (1984, 1988). Other undocumented stockings have included black bullhead, gizzard shad, white crappie, black crappie and common carp.

Current Land and Water Types:

Land/Water Type	Acres	% of Area
Old Field	30	43
Impoundments	29	41
Woodland	11	16
Total	70	100

Public Input Summary:

The draft Limpp Community Lake Area Management Plan was available for a public comment period October 1–31, 2014. The Missouri Department of Conservation received comments from 2 respondents (Appendix A). The Limpp Community Lake Area Planning Team carefully reviewed and considered these ideas as they finalized this document. A brief summary of public input themes, including how they were incorporated or why they were not, can be found below. Rather than respond to each individual comment, comments are grouped into general themes and are addressed collectively.

Department responses to themes and issues identified through Limpp Community Lake public comment period

Requests regular mowing around the lake perimeter as a walking trail.

Due to unforeseen circumstances the area access trail around the perimeter of Limpp Community Lake was not routinely maintained during 2014. The situation has been remedied and the area access trail, along with the parking lot area and dam, are now on a routine mowing schedule.

Suggests stocking flathead catfish to reduce undesirable fish species.

MDC has an on-going research project in which flathead catfish and hybrid striped bass are experimentally stocked in Limpp Lake (and a few other small reservoirs in north Missouri) to measure effects on common carp, gizzard shad, and slow-growing panfish populations. The purpose is to determine if predation rates by these species are adequate to reduce carp and shad abundance and increase panfish growth. This research began in 2013 and will continue through 2019. Flathead catfish were first stocked in 2014 with additional stocking planned for 2015 and 2016.

Maps:

Figure 1: Area Map

Figure 2: Land Uses in Limpp Community Lake Watershed (Green Boundary)

Additional Appendices:

Appendix A: Limpp Community Lake Area Management Plan Public Comments

Figure 1: Area Map

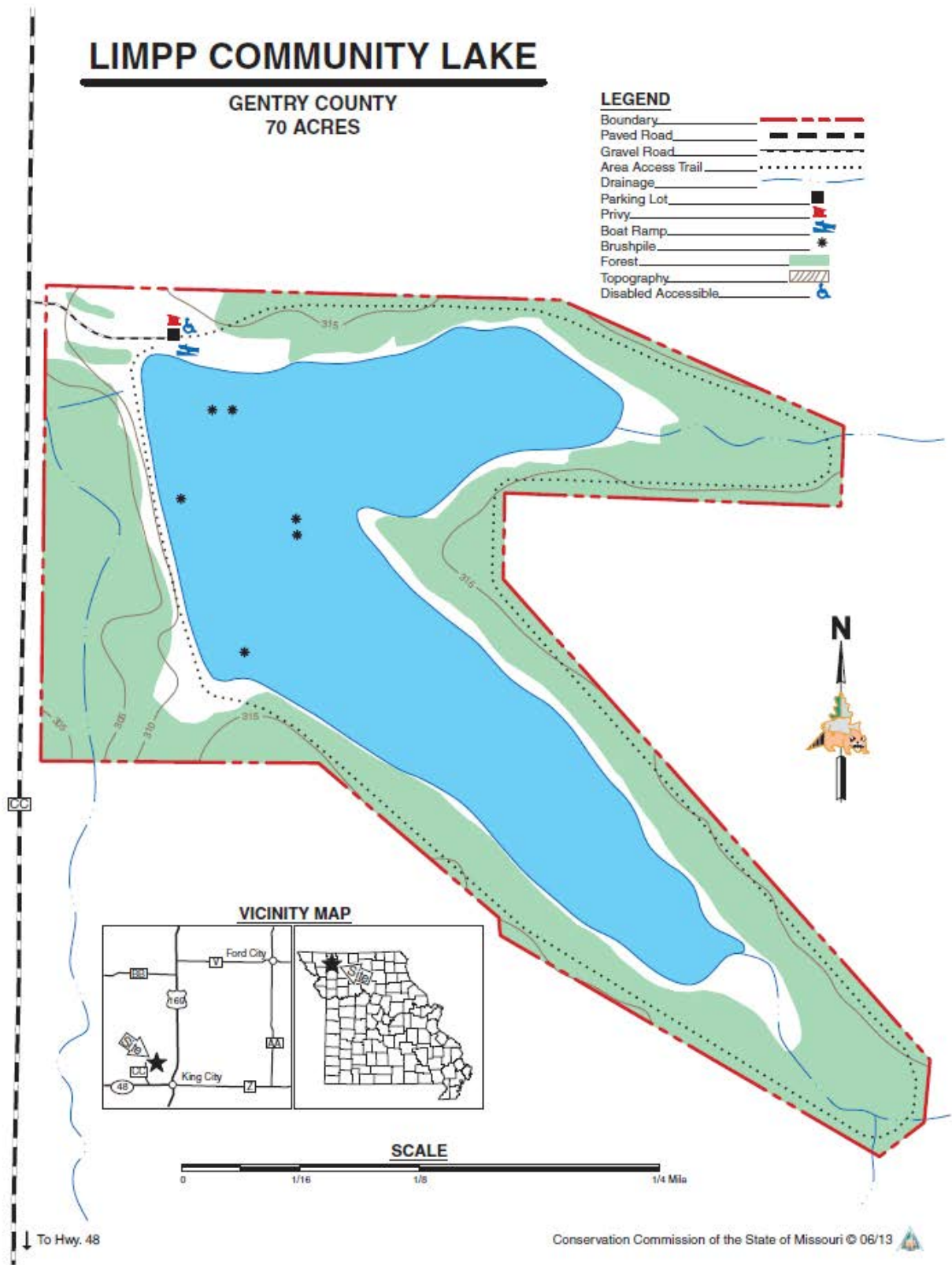
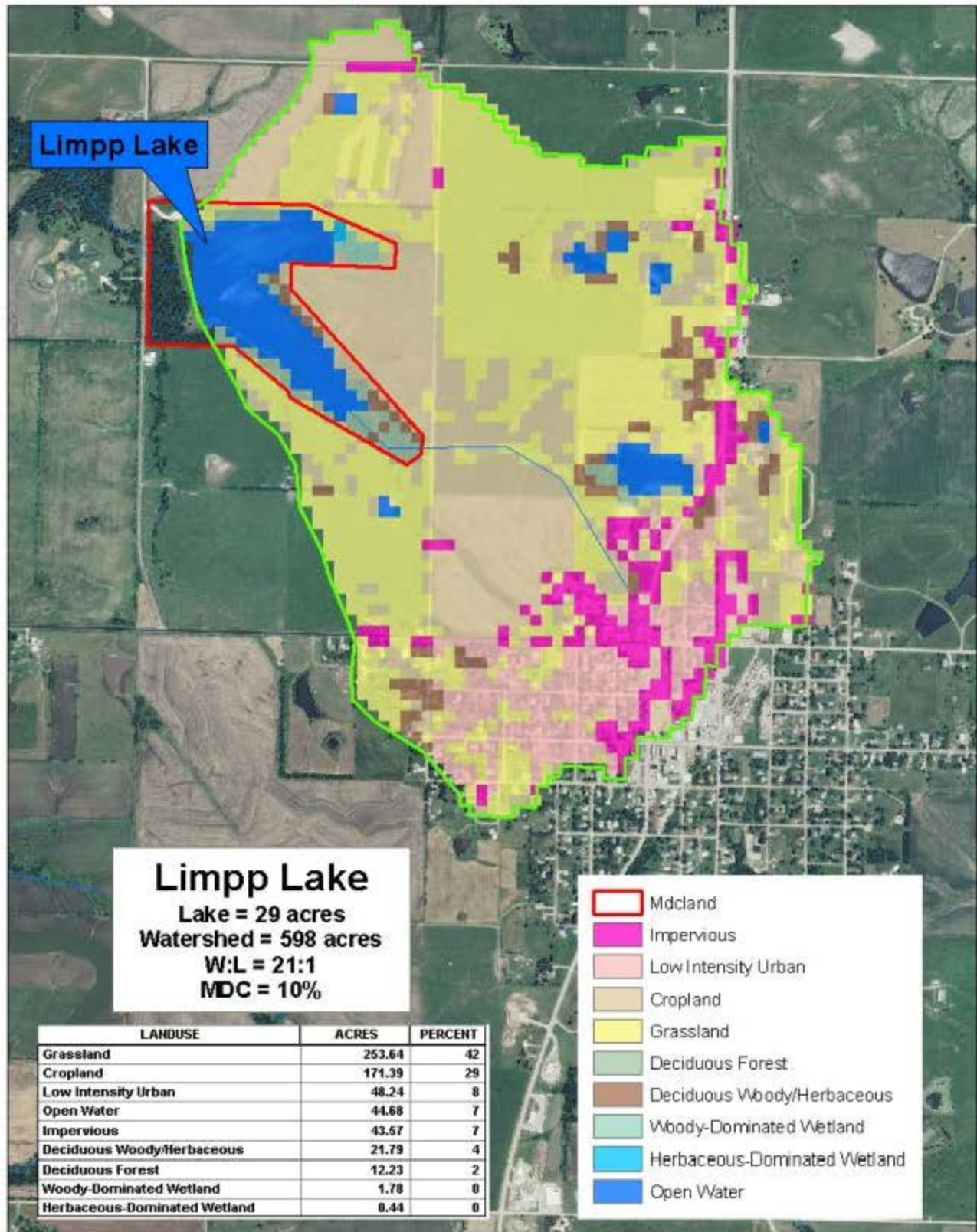


Figure 2: Land Uses in Limpp Community Lake Watershed (Green Boundary)



Appendix A. Limpp Community Lake Area Management Plan Public Comments

Received during public comment period (October 1-31, 2014)

It would be greatly appreciated if maintenance of the "trail," the outer perimeter surrounding Limpp Lake could be resumed. It is a great place to walk, but it has not been mowed the entire summer of 2014. Granted, the area around the parking lot and a portion of the dam has been. Can't imagine it would take more than an hour to mow the loop around the lake while the mowers are there! With natural public trails non-existent in this area, that one was conveniently located and accessible.

I fish Limpp quite a bit. Specifically for carp. That is just because I like to catch them for sport. I also will go to King Lake and Pony Express. These are all kind of in the same area and although the land around each is handled differently each has a common problem. Tons of carp, a lot of shad and a stunted crappie population. I know that you all stock a lot of channel cat but have you ever considered maybe shifting a lot of the stocking to emphasize flathead fishing. I see you are thinking about wipers too but I feel if you would stock those small lakes with as many flathead as you do Channels those bad boys would clean out a lot of your un-desirable fish.